## OFF THE BACK ROADS AND ONTO THE SUPERHIGHWAY: RECLAMATION REPORTS

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Stop this madness, Lear – Earl of Kent William Shakespear, King Lear

Archaeology is a philosophical endeavor. It is also a discipline rooted in history that reports on history. It is also a science that experiments and reports on the human experience; it tests hypotheses, analyzes data, builds cases of discovery, and creates and delivers an understanding (both theoretical and real) of human adaptation, interaction, and relationships. Archaeologists do many things to perfect their discoveries; they collect, analyze, test, create, simulate, re-create, experiment, and write and report on their thoughts and findings. Archaeology is an exercise of intense concentration that demands organization of thought and product.

Over the past 25 years, reporting of archaeological research has become an area of critical concern. We have heard reference to the dreaded "grey literature": how it is inconsequential, how it is substandard, how it is poor science, how it is not shared, and how it will steal the birth right of "good" archaeologists. Well, I say poppycock and balderdash! Yes, there are problems with "grey literature," but they are not singular to Cultural Resource Management (CRM). All reporting outlets—commercial publishers, university presses, government agencies, CRM firms, and local archaeological societies—suffer from their author's lack of timeliness, quality of data recovery, quality of analysis, quality of thought, and incompetent writing.

Since the mid 1970s, the Phoenix Area Office (PXAO) has managed a number of large archaeological projects that have produced lasting contributions to central Arizona archaeology. The reports are part of the content of "grey literature," but they are golden in content. What I want to present to you is a story of shared understanding and commitment by professional

archaeologists (basically, their passion and good academic training), and risk taking by agency officials (basically, their knowing when to do the right thing). The PXAO archaeology program is a story of success. It is a story of good archaeology. And, its legacy is a story that will continue to be told, hopefully for many years to come.

In the early years of American archaeology, monographs and major site histories were published by the Bureau of American Ethnology (BAE), the Smithsonian Institution, the Peabody Museum, and other major museums associated with universities and departments of anthropology. These efforts, from the late nineteenth century to the mid twentieth century, form the backbone of any archaeology library, be it public or personal. For the Southwest United States, Adolph Bandelier's 1892 report on his investigations in the Southwest, Jesse Walter Fewkes' (1912) report on Casa Grande, Emil Haury's (1945) report on Los Muertos, and Frank H. H. Roberts' (1929) report on Shabik'eshchee Village (and his many other BAE reports) are but a few of the major archaeological works that grace professional libraries. For the generation of archaeologists that grew up with CRM in the 1970s, these works are not available, at least in original form.

Neither the Smithsonian Institution, National Park Service (NPS), or Government Printing Office (GPO), who produced BAE publications, could provide accurate print run numbers. They estimate that a print run was about 1,200 copies. Reports were sent to libraries, and individuals could purchase copies directly from the BAE. Until 1969, when the BAE was removed from the government, these numbers adequately accommodated the needs of the discipline.

It is interesting to note that many BAE publications were the result of the River Basin Survey (RBS) program, the precursor of modern CRM (Jennings 1985). Primarily written by academic archaeologists, RBS reports (to my knowledge) are not generally labeled "grey literature," yet they are the results of "salvage archaeology," a "second rate" moniker to some at the time. As we all happily know, the "second rate" label vanished as quickly as a Texas snow storm once the reports appeared and were received by a critical audience. Time will tell if CRM reports will fare as well. Despite good results, the RBS program did not enjoy a stellar publication record. Donald Lehmer (1965) was critical of the record produced for the Missouri

River Basin, estimating that only 25% of the data recovered was reported by 1964, almost 20 years into the program. While the published reports were excellent, the loss of data and lack of published results were significant. Remember though, what was reported was adequately available and distributed.

The obligation of archaeology reporting today must be consistent with the goals of the discipline. Competent reporting is more than site reports and history. It must contain theory, plan, method, comparative synthesis, evaluation, and interpretation all aimed at synthesizing the human experience, no matter how small the unit of study. It is true that the "grey literature" of CRM is variable in content and value. It is a tedious exercise to explore. It seems endless. But it is necessary and important for the conduct of archaeology. Problems with publishing and disseminating archaeological research are not new concepts. Competency is an issue in all scholarly endeavors. The "Crisis In Communication" discussed in 1974 at the Airlie House seminars (McGimsey and Davis 1974:78-89) is probably not as critical as it once was, but without constant vigilance and reminders, the "crisis" could become a major issue.

In 1974 the Airlie House seminar participants concluded that "... the current mechanisms for communication among active participants in archaeology are something less than adequate" (McGimsey and Davis 1977:81). To solve this problem, seminar recommendations included: (1) centralization of both internal and external communication to act like a chamber of commerce marketing arm; (2) a national newsletter; and (3) greater distribution of data through the use of microfiche (McGimsey and Davis 1977:83). The actual publication and distribution of data was identified as an area of critical concern. The increasing cost of publication, and the eventual acquisition of reports, was seen as a real problem, and we all know that this issue continues today as an even greater problem, as the pace of archaeology reporting has increased so dramatically over the past 25 years. Some effective solutions to issues 1 and 2 have been implemented such as Society for American Archaeology's Bulletin and Archaeology and Public Education and NPS' publications, CRM and Common Ground. The sponsors of these public outreach series provide a central focus for the discipline, and offer information to the profession and public.

Publication and dissemination of professional reports and data is another matter, however. Microfiche was the idea in 1974. It has been inconsistently applied, and is no longer current technology. How many organizations have microfiche readers? Not many, I am sure. (Most Federal offices do, but that is another sad chapter in the evolution of dinosaurs.) Application of current technology is desirable, but one must recognize the dangers of inconsistent application of technology: the incredibly restricted shelf life of communication technology developed in the past 25 years; the inability of an organization to change as new, even better, technology is developed; and the inability to transfer data to current technology. As Alan Ferg (1997), archivist at the Arizona State Museum, so succinctly pointed out to me recently, "Technology is well and good, but reality is that there is no better way to preserve data than a hard paper copy." Yes, but hard copy is expensive. Centralization is another problem, SAA and NPS attempts notwithstanding, as evidenced by the National Technical Information Service (NTIS) and its poor quality of reports, poor advertising, poor participation, and poor record of use. No one bothers with NTIS because the product is bad and often not available.

The Phoenix Area Office began funding large archaeological investigations during the mid 1970s, about the time of the Airlie House seminars. As a direct result of personnel hires, most importantly Ward Weakly and Gene Rogge, the program adopted a philosophy of Cultural Research Management (Rogge 1983:23). Part of that philosophy included demand for high quality research consistent with approaches sanctioned by the Society for American Archaeology and academic institutions, larger than usual print runs for reports, and public education components for all major projects. Let me share with you some of the fruits of the PXAO program.

A priority was to get reports into federal and state agencies, libraries, CRM companies, and academics to the greatest extent possible especially at the regional level within Arizona and the greater Southwest. Report print runs have ranged between 125 and 200 copies, much less than we would like but a number far greater than usual for CRM reports. And our contractors, be they universities or private firms, have routinely printed comparable quantities for their own

distribution. As a result, the many volumes produced for the Central Arizona Project are in use by academia and CRM alike, and transcend the label "grey literature." Some of these reports are standard reference volumes in Hohokam archaeology (not because of the quantity of reports—provided at no charge—but because of the quality of investigation and analysis).

All of these projects included significant public education requirements, as much of 4% of budgets that could be several millions of dollars. Results included brochures, audio-slide productions, narrated videos, teaching plans, traveling and permanent exhibits, open houses, and site tours. The permanent exhibit at the Arizona Historical Society (AHS), Central Arizona Museum, is a case in point. In partnership with AHS, PXAO provided funds and technical assistance in development of the museums' major permanent exhibit on Theodore Roosevelt Dam. This award winning exhibit chronicles the development of Theodore Roosevelt Dam in the early twentieth century, the history of the technology of water development, the changing of the western landscape by water development, and the politics of water in the desert. As the partnership developed, AHS paused in its thinking about central Arizona history and the story it was to tell. This pause and reflection resulted in water adaptation, technology, and politics becoming the central themes for the new museum. Arguably, water is the most important theme in twentieth century Arizona and one that has been inadequately developed. In 1996, the exhibit won the Dibner Award from the Society for the History of Technology. It was the first civil engineering exhibit to be awarded by that esteemed organization.

In 1986, as a direct result of recommendations made during a program review conducted by Fred Wendorf, George Gumerman, and Larry Banks, under the auspices of the Departmental Consulting Archaeologist, PXAO implemented two new approaches to further the dissemination of Federal CRM activities: (1) it required contractors to submit, in addition to technical reports, results of activities to major refereed journals for publication, and 2) it required contractors to propose symposia for consideration by professional societies for their annual meetings. In addition to the traditional final contract report, over the past 12 years the PXAO cultural resource program and its contractors have successfully organized 12 symposia, presented 115 papers at

professional meetings, published 34 articles in major journals or books, published 11 books or monographs, completed 7 dissertations and 3 masters theses, and had over 10,000 visitors to sites during open houses. The hugely successful Exploring the Hohokam (Gumerman 1991), published by the Amerind Foundation and University of New Mexico Press (UNM Press), set a new standard for CRM sponsored publications. It will be followed by a similar synthesis of Salado archaeology (Dean, in press) from the Bureau of Reclamation's recently sponsored CRM investigations in Arizona's Tonto Basin. This latter volume will also be published by the Amerind Foundation and UNM Press. Each of these books had or will have print runs of 2,500 copies. In addition, the University of Arizona Press has published four Anthropological Papers on behalf of the Arizona State Museum from Central Arizona Project projects. In 1988, the Museum of Northern Arizona published a Reclamation sponsored monograph on the Arizona work of Erich Schmidt as a precursor to work in the Tonto Basin (Hohmann and Kelley 1988).

Chances are a number of these activities would have occurred anyway, but the pace certainly quickened once they became a contract requirement. Nonetheless, two important points to remember are: (1) the technical reports and monographs were accomplished with Federal financial assistance, these days an increasingly scarce commodity, and (2) they cannot be considered "grey literature" even by the most cynical archaeologists. They represent the highest quality of archaeological production and reporting.

University of Arizona Press also published Raising Arizona's Dams (Rogge et. al. 1995), which has been favorably reviewed in professional journals. Nonetheless, the most recent review by Mary L. Maniery (1997) still is critical of the information content of this very successful volume. Says Maniery (1997:130), "The text is witty, lively, and compelling, yet details I longed for as an archaeologist are lacking. The nuts and bolts research and analysis that formed the basis of camp life interpretation are not elaborated on ..." (1997: 130). This criticism might have been avoided had Maniery taken the time to acquire the other 5 volumes containing the "nuts and bolts" of this archaeology project, but we only printed and distributed 200 copies. So, Reclamation spends more money to produce a publication that is acclaimed by both professional

and public audiences, and it still gets smacked by a reviewer who wants it all in one. How can one do more to deliver the goods?

In early 1998, PXAO printed the final report for the Verde River Safety of Dams projects. Vanishing River (Whittlesey, Ciolek-Torrello, and Altschul 1998) brings full archaeology reporting into the realm of possibilities. The hard cover 823 page synthesis is not unique by CRM or academic reporting standards, other than that it was printed by the Government Printing Office, a throwback to an earlier time. What is unique about Vanishing River is the compact disc that contains the entire suite of archaeological data and imagery that one would normally find in data volumes and unpublished project documents—the equivalent of three, thick volumes including over 300 pictures, most in full color. For these projects, PXAO and its contractor, Statistical Research, Inc., have provided it all. The CD is very user friendly, linking text, tables, figures, images, appendixes, and references, thereby making navigation through this incredible amount of data easy. The CD text reads like a book, is searchable, and may be printed as individual pages or in total. The CD also comes with a digitally created video of the Verde River project area. The CD was not created with data manipulation as an option; however, data tables can be downloaded and processed using other data manipulation software. Reclamation had 1,000 copies of the book and CD printed by GPO for a little over \$23,000. GPO purchased an additional 430 copies for distribution to GPO libraries across the country. Vanishing River is stimulating, provocative, and of extremely high quality—it is very fresh. I would be happy to stack Whittlesey, Reid, and Altschul up against anyone Cambridge University Press is currently publishing.

Twenty years ago Fred Wendorf (1979:642) lamented, "I can foresee a time when archaeology may come to be regarded, even by archaeologists, as nothing more than a service industry, when archaeologists regard themselves as the peers of beauticians and plumbers, who have no obligation whatsoever beyond the simple repair jobs they are called in to do. They may fulfill a contract in the very strictest sense, but will go on from there to the next contract rather than to the assimilation and synthesis of the data... ." I happily note that Dr. Wendorf's fears have

not become an industry nightmare. The major works of CRM are no greyer than that of academia or the National Science Foundation. In fact, because of CRM's funding possibilities, its reports may shine into the 21st century as world wide publishing on the Internet is implemented along with virtual museums and archives.

## References

Bandelier, Adolph F. 1892. Investigations Among the Indians of the Southwestern United States, Carried on Mainly in the Years from 1880 to 1885. Papers of the Archaeological Institute of America 4(2).

Dean, Jeffrey S., ed. In press. Salado. Amerind Foundation New World Studies, No. 4., University of New Mexico Press, Albuquerque.

Ferg, Alan. 1997. Personal communication.

Fewkes, Jesse Walter. 1912. Casa Grande, Arizona. Twenty-eighth Annual Report of the Bureau of American Ethnology. Pp: 25-179. Government Printing Office, Washington, D.C.

Gumerman, George J., ed. 1991. Exploring the Hohokam: Prehistoric Desert Peoples of the American Southwest. Amerind Foundation New World Studies Series, No. 1. University of New Mexico Press, Albuquerque.

Haury, Emil W. 1945. The Excavation of Los Muertos and Neighboring Ruins in the Salt River Valley, Southern Arizona. Papers of the Peabody Museum of American Archaeology and Ethnology, Vol 24, No. 1. Harvard University, Cambridge.

Hohmann, John W. and Linda B. Kelley. 1988. Erich F. Schmidt's Investigations of Salado Sites

in Central Arizona. Museum of Northern Arizona Bulletin 56. Museum of Northern Arizona Press, Flagstaff.

Jennings, Jesse D. 1985. River Basin Surveys: Origins, Operations, and Results, 1945-1969. American Antiquity 50:281-296.

Lehmer, Donald J. 1965. Salvage Archaeology in the Middle Missouri. A Summary and Evaluation. Prepared for the National Park Service.

Maniery, Mary L. 1997. Review. "Raising Arizona's Dams: Daily Life, Danger, and Discrimination. In: The Dam Construction Camps of Central Arizona, 1980s-1940s," by A.E. Rogge, D. Lorne McWatters, Melissa Keane, and Richard P. Emanuel. Historical Archaeology 31:129-130.

McGimsey, Charles R. III and Hester A. Davis, eds. 1977. The Management of Archaeological Resources: The Airlie House Report. Special Publication of the Society for American Archaeology.

Roberts, Frank H. H., Jr. 1929. Shabik'eschee Village: A Late Basket Maker Site in Chaco Canyon, New Mexico. Bureau of American Ethnology, Bulletin 92. Government Printing Office, Washington, D.C.

Rogge, A. E. 1983. Little Archaeology, Big Archaeology: The Changing Context of Archaeological Research. Unpublished Ph.D. Dissertation, Department of Anthropology, University of Arizona, Tucson.

Rogge, A. E., D. Lorne Watters, Melissa Keane, and Richard P. Emanuel. 1995. Raising Arizona's Dams: Daily Life, Danger, and Discrimination in the Dam Construction Camps of Central Arizona, 1890s-1940s. University of Arizona Press, Tucson.

Wendorf, Fred. 1979. Changing Views in Archaeology. American Antiquity 44:641-643.

Whittlesey, Stephanie M., Richard Ciolek-Torrello, and Jeffrey H. Altschul. 1998. Vanishing River: Landscapes and Lives of the Lower Verde Valley. SRI Press, Tucson